# **Hurricane Dorian | Report #2**

**REPORT TIME & DATE:** 9:00 AM EDT | Thursday, August 29, 2019

**INCIDENT START DATE:** August 28, 2019

**PRIMARY LOCATION(S):** Puerto Rico & U.S. Virgin Islands

**REPORT DISTRIBUTION:** Public

## **EXECUTIVE SUMMARY**

As of 5:00 AM EDT, Hurricane Dorian was 150 miles north-northwest of San Juan, Puerto Rico, moving northwest at 13 MPH, with maximum sustained winds of 85 MPH (category 1). A west-northwestward motion is forecast to begin Friday night and continue into the weekend. Dorian is expected to approach the east coast of Florida and/or southern Georgia early Monday. Hurricane Dorian passed over the U.S. Virgin Islands and far eastern portions of Puerto Rico on Wednesday afternoon.

## **Electricity Sector Summary**

- Puerto Rico: As of 8:00 AM EDT August 29, the Puerto Rico Electric Power Authority (PREPA)
  reported 7,430 customer outages in Puerto Rico, scattered across the Islands. Vieques and
  Culebra, which were directly impacted, are reporting no significant power outages at this time.
- U.S. Virgin Islands: As of 8:00 AM EDT August 29, Virgin Islands Water & Power Authority (VIWAPA) reported 7,873 customer outages across St. Thomas and St. John. Power was fully restored to St. Croix as of 7:20 PM EDT August 28.

### Oil & Natural Gas Sector Summary

- All ports in Puerto Rico and the U.S. Virgin Islands remain closed. Port assessments are underway.
- The fuel supply chain across Puerto Rico and the U.S. Virgin Islands is stable.

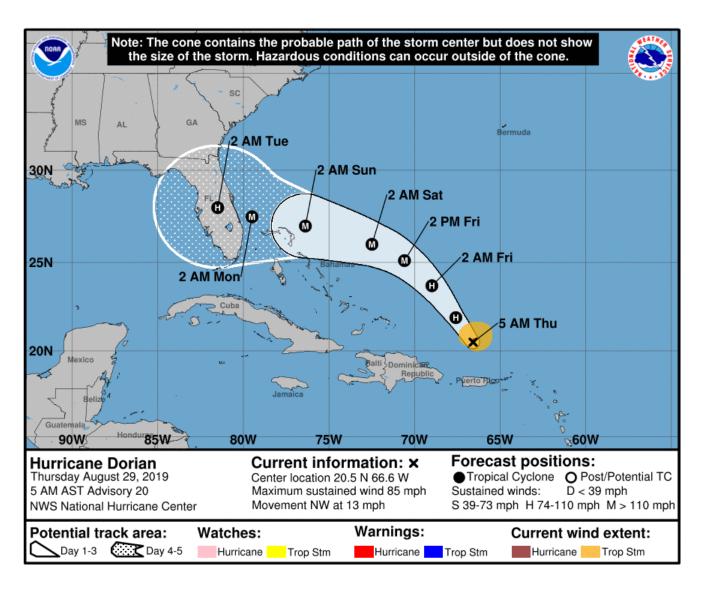


# **Hurricane Dorian**

As of 5:00 AM EDT, Hurricane Dorian was 150 miles north-northwest of San Juan, Puerto Rico, moving northwest at 13 MPH, with maximum sustained winds of 85 MPH (category 1). Hurricane-force winds extend outward up to 15 miles and tropical storm-force winds extend outward up to 90 miles from the center. A west-northwestward motion is forecast to begin Friday night and continue into the weekend. On the forecast track, Dorian is expected to move over the Atlantic, east of the southeastern and central Bahamas today and Friday, and approach the northwestern Bahamas on Saturday. Dorian is expected to approach the east coast of Florida and/or southern Georgia early Monday.

Dorian is expected to produce 4 to 8 inches of rainfall, with isolated totals up to 12 inches, across coastal sections of the Southeast United States.

No coastal watches or warnings are in effect at this time.





# **ELECTRICITY SECTOR**

# **POWER OUTAGES**

Hurricane Dorian Customer Outages as of 8:30 AM EDT August 29, 2019						
Impacted State	Current Customer Outages	Percent of Estimated Customers without Power	24-hr Peak Customer Outages			
Puerto Rico	7,430	<1%	N/A			
U.S. Virgin Islands	7,880	14%	40,469			
St. Thomas	7,192	26.5%	21,799			
St. John	681	2.7%	2,491			
St. Croix	7	0.2%	16,860			
Total	15,310		1			



#### **DETAILS BY TERRITORY**

### **Puerto Rico**

### Puerto Rico Electric Power Authority (PREPA)

- As of 8:00 AM EDT August 29, PREPA reported 7,430 customer outages in Puerto Rico.
- Vieques and Culebra reporting no significant power outages (100% with power).
- The Mayor of Culebra reported early August 29 that there was minimal damage, and only one community on the island lost power during the storm.
- Lineworkers in Barranquitas are preparing to repair electrical issues affecting Orocovis customers.
- On August 28, Gov. Andrew Cuomo dispatched two crews of New York Power Authority (NYPA) personnel to Puerto Rico and the U.S. Virgin Islands to help with power restoration if needed.
- The Puerto Rico Electric Power Authority (PREPA) reported a significant inventory of materials, including generators, compared to inventory available prior to Hurricane Maria.
- PREPA is a member of the American Public Power Association (APPA), which coordinates mutual
  assistance efforts across municipal utilities. PREPA is holding regular calls to discuss any resource
  and mutual assistance requirements with APPA.

# **U.S. Virgin Islands**

### Virgin Islands Power and Water Authority (VIWAPA)

- As of 8:00 AM EDT August 29, VIWAPA reported 7,873 customer outages across St. Thomas and St. John.
- Power was fully restored to St. Croix as of 7:20 PM EDT August 28.
- At the peak on August 28, VIWAPA had more than 40,000 customers without power.

### St. Thomas & St. John

- VIWAPA continues restoration work on St. Thomas and St. John, including working to rebuild generation capacity at the Randolph Harley Power Plant.
- As of 7:00 AM EDT August 29, only three full feeders (5A, 6A, and 8A) and portions of an additional three feeders (6B, 7C, and 7E) are without power.

#### St. Croix

- VIWAPA reported all feeders in St. Croix were re-energized as of 7:20 PM EDT August 28.
- Throughout the storm's passage, the Estate Richmond Power Plant remained in service, allowing three feeders (3A, 4A, and 5A) to stay online during the storm.



# **OIL AND NATURAL GAS SECTOR**

**Puerto Rico** imports petroleum products—primarily residual fuel, motor gasoline, and distillate fuel—at four principal ports (San Juan, Yabucoa, Guayanilla, and Ponce). From terminals at these ports, fuels are distributed by truck to retail stations or by barge to coastal power plants, including plants near Arecibo, Mayaguez, Salinas/Aguirre, and Guayama. Puerto Rico's power sector is highly reliant on petroleum fuels; 40% of the territory's power plants burn residual fuel oil and 30% burn diesel fuel. Much of the remaining electricity generation capacity is fueled by natural gas, which is imported through the Peñuelas liquefied natural gas (LNG) import terminal in Guayanilla, where it is regasified and delivered by pipeline to the nearby EcoEléctrica and the Costa Sur generating stations.

The U.S. Virgin Islands imports petroleum products primarily through the ports of Limetree Bay and Christiansted on St. Croix. The petroleum terminal at Limetree Bay is a logistics hub for the Caribbean region, importing, storing, and then exporting petroleum products. St. Thomas mostly receives petroleum products by barge from Puerto Rico, as well by tanker trucks, which are delivered on "roll-on, roll-off" marine vessels. USVI power plants run primarily on fuel oil but propane is a growing source for electricity.

### **PORTS**

The U.S. Coast Guard has set the following conditions for ports and waterways in Sector San
Juan as a result of Hurricane Dorian. Listed in the table are select ports that receive petroleum
products.

Status of Caribbean Ports as of 9:00 AM EDT 08/28/2019							
	2019-to-date						
Port	Product	Date Stamp	Status				
	Imports (b/d) <sup>A</sup>						
Puerto Rico							
San Juan	75,400	Port Condition Zulu. Closed.	8/28/19				
Ponce	29 400	Port Condition Zulu. Closed.	8/28/19				
Guayanilla	38,400	Port Condition Zulu. Closed.	8/28/19				
Yabucoa	34,600	Port Condition Zulu. Closed.	8/28/19				
Mayaguez	B,C	Port Condition Zulu. Closed.	8/28/19				
Arecibo	В,С	Port Condition Zulu. Closed.	8/28/19				
Guayama	В,С	Port Condition Zulu. Closed.	8/28/19				
Roosevelt Roads	В	Port Condition Zulu. Closed.	8/28/19				
Salinas/Aguirre	В,С	Port Condition Zulu. Closed.	8/28/19				
U.S. Virgin Islands							
Christiansted, St. Croix	47.000	Port Condition Zulu. Closed.	8/28/19				
Limetree Bay, St. Croix	47,000	Port Condition Zulu. Closed.	8/28/19				
St. John B		Port Condition Zulu. Closed.	8/28/19				
St. Thomas	В,С	Port Condition Zulu. Closed.	8/28/19				

<sup>&</sup>lt;sup>A</sup> All petroleum products, excluding asphalt.

Source: Receipt data from U.S. Customs via Reuters EIKON (Jan-Aug. 2019 average), USITC DataWeb (Jan.-June 2019)



<sup>&</sup>lt;sup>B</sup> No direct foreign imports but receives petroleum products from larger ports by barge.

<sup>&</sup>lt;sup>c</sup> Receives fuel for oil-fired power plant.

#### **FUEL INVENTORIES**

### Puerto Rico

 Puerto Rico Transport and Public Services Bureau reports that propane shipments were made to Vieques and Culebra (islands just off the east coast of Puerto Rico) ahead of the storm to serve as reserves in the event access to the main island is limited.

# **EMERGENCY DECLARATIONS & WAIVERS**

### **EMERGENCY DECLARATIONS**

To provide vital supplies and transportation services to a disaster area in the United States, emergency declarations may be issued by the President, Governors of States, or Federal Motor Carrier Safety Administration (FMCSA). These declarations trigger the temporary suspension of certain Federal safety regulations, including Hours of Service, for motor carriers and drivers engaged in specific aspects of the emergency relief effort. See 49 CFR 390.23 for the actual emergency regulation.

State Emergency Declarations and HOS Waivers as of 9:00 AM EDT 08/28/2019						
State/Territory	Details	Effective Dates		Status		
		Start	End	Status		
Puerto Rico	State of Emergency	8/26/2019	Until rescinded	Active		
Virgin Islands	State of Emergency	8/28/2019	Until rescinded	Active		
Florida	State of Emergency	8/28/2019	60 days unless	Active		
			extended			

Sources: U.S. Department of Transportation; Governor Office Websites

